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Claims

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1.   A method for managing access to an event of a service provider, said method comprising:

5   (a)   receiving in a device an electronic list of events from a list provider, said list having a digitally signed message corresponding to each event in said list, each of said digitally signed messages comprise a message encrypted using a second public key and a digital signature created using a first private key;

10   (b)   selecting an event from said list;

(c)   receiving in said device said digitally signed message corresponding to the selected event;

(d)   authenticating said list provider, using a first public key, in response to said digital signature;

15   (e)   decrypting said message using a second private key to obtain an event key;

(f)   receiving from the service provider said selected event, said selected event being scrambled using said event key; and

(g)   descrambling said selected event using said event key to

20   provide a descrambled event.

2.   The method of Claim 1 wherein the steps of decrypting said message, receiving said selected event, and descrambling said selected event are performed in a smart card coupled to the device,

25   said second private and public keys being associated with said smart card and said second private key being stored in said smart card.

3.   The method of Claim 2 wherein said message further comprises event information, said event information being decrypted using said second private key.

5   4.   The method of Claim 3 further comprising the step of storing said event information, wherein said step of storing said event information is performed in said removable smart card.

5.   The method of Claim 4 wherein said smart card has a card body

10   having a plurality of terminals arranged on a surface of said card body in accordance with one of ISO 7816 and PCMCIA card standards.

6.   The method of Claim 5 wherein the step of authenticating comprises decrypting said digital signature in said device to verify

15   the origin of said message.

7.   The method of Claim 6 wherein said first public key is stored in said device.

8.   The method of Claim 4 wherein said event information comprises channel identification data, event identity data, date and time stamp data, and billing data.

9.   The method of Claim 3 further comprising the step of storing

25   said event information, wherein said step of storing said event information is performed in said device.

10. The method of Claim 1 wherein said digital signature, said first public key and said first private key are issued by an independent certificate authority and are associated with said list provider.

5   11. The method of Claim 10 wherein said device is a digital television.

12. The method of Claim 10 wherein said device is a set-top box.

10   13. The method of Claim 4 wherein said event information is used within said device to update said user's account information.

14. The method of Claim 13 wherein said event information is downloaded to an independent billing center to update a user's

15   account information.

15. In combination in a system for managing access between a service provider and a device having a smart card coupled thereto, said device performing the steps of:

20   (a)   receiving an electronic program guide from a guide provider, said guide having a digitally signed message corresponding to each event in said guide, each of said digitally signed messages comprise a message encrypted using a public key of the smart card and a digital signature created using a private key of said guide

25   provider;

          (b)   selecting an event from said guide;

          (c)   receiving said digitally signed message corresponding to the selected event;

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(d) authenticating said guide provider by decrypting said digital signature using a public key of said guide provider, said guide public key being stored in said device;

(e) passing said message to a smart card coupled to the

5 device;

(f) decrypting said message using a private key of the smart card to obtain event information and a symmetric key, said smart card private key being stored within the smart card;

(g) storing said event information in the smart card and

10 updating account information based on said event information;

(h) receiving from the service provider said selected event, said selected event being scrambled using said symmetric key; and

(i) descrambling, in said smart card, said selected event using said symmetric key to generate a descrambled event.

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16. The combination of Claim 15 wherein the device is a set-top box.

17. The combination of Claim 15 wherein the device is a digital

20 television.

18. In combination in a system for managing access between a service provider and a device having a smart card coupled thereto, said device performing the steps of:

(a)   receiving an electronic program guide, said guide having a

5   digital certificate and a separate message corresponding to each event in said guide, each of said digital certificates being encrypted using a first private key of said guide, said separate message being encrypted using a public key of the smart card and having an associated digital signature created using a second private key of said guide;

10   (b)   selecting an event from said guide;

(c)   receiving said digital certificate, said message and said digital signature corresponding to the selected event;

(d)   authenticating said guide provider by decrypting said digital certificate using a first public key of said guide to obtain a

15   second public key of said guide, and decrypting said digital signature using said second guide public key, said first guide public key being stored in the device;

(e)   passing said message to said smart card;

(f)   decrypting said message using a s private key of the

20   smart card to obtain event information and a symmetric key, said smart card private key being stored within the smart card;

(g)   storing said event information in the smart card and updating account information based on said event information;

(h)   receiving from the service provider said selected event,

25   said selected event being scrambled using said symmetric key; and

(i)   descrambling, in said smart card, said selected event using said symmetric key to generate a descrambled event.

19.   The combination of Claim 18 wherein the device is a set-top box.

20.   The combination of Claim 18 wherein the device is a digital

5   television.